

## Network Traffic Synchronization Mechanism

### Abstract of the Disclosure

5       Methods, apparatuses and systems directed to a network traffic  
synchronization mechanism facilitating the deployment of network devices in  
redundant network topologies. In certain embodiments, when a first network device  
directly receives network traffic, it copies the network traffic and transmits it to at  
least one partner network device. The partner network device processes the copied  
10 network traffic, just as if it had received it directly, but, in one embodiment,  
discards the traffic before forwarding it on to its destination. In one embodiment,  
the partner network devices are operative to exchange directly received network  
traffic. As a result, the present invention provides enhanced reliability and seamless  
failover. Each unit, for example, is ready at any time to take over for the other unit  
15 should a failure occur. As discussed below, the network traffic synchronization  
mechanism can be applied to a variety of network devices, such as firewalls,  
gateways, network routers, and bandwidth management devices.